The Rip Tide

The Bi-monthly E-newsletter of the New Hampshire Coastal Program, May/June 2005

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NEWS

Marsh Monitors Attend Trainee Sessions

NHCP, Ducks Unlimited, and UNH train prospective marsh monitor volunteers both in and out of the classroom.

Success in Sandown: Conservation Commission Circuit Riding Project

NHCP coastal nonpoint source pollution control grant helps the Sandown Conservation Commission meet its goals for town meeting 2005.

Surfing in New Hampshire Not for the Faint of Heart

Surfers in New Hampshire do not fit the typical image of a bronzed co-ed on a wall of blue water. Clad in wetsuits and battling unpredicatable conditions, area surfers often use rocks rather than beach to get the best waves. But their skill and enthusiasm are at the heart of this sport.

Surfing Activism in Northern New England

Learn about the Northern New England Chapter of Surfrider Foundation, a national nonprofit working to working to protect oceans, waves and beaches.

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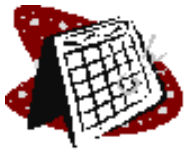

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News

Marsh Monitors Attend Trainee Sessions

"What kind of boots do I need?" asked a prospective marsh monitor.

"Typically knee-sized. But some of our more adventurous volunteers, who like to explore or tend to fall in, wear waders," replied Jen Drociak, NHCP Restoration Specialist.

On Tuesday May 24, ten participants attended a classroom training session at Great Bay National Estuarine Research Reserve in Stratham to learn more about the New Hampshire Marsh Monitors, a volunteer program run through a partnership between NHCP, Ducks Unlimited and the University of New Hampshire (UNH) Jackson Estuarine Laboratory. Throughout the summer, volunteers assess salt marsh health by monitoring and sampling salinity and groundwater levels, vegetation, and fish and bird populations.

Marsh monitor trainees learn how to capture and identify fish (foreground) and survey vegetation (background) in Great Bay.

Prospective volunteers listened to presentations from project partners giving background on the program, including Jen Drociak, NHCP, Dave Burdick, UNH, and Patti Reilly and Brandi Bornt, Ducks Unlimited. Volunteers also learned about equipment use, including fish sampling nets, vegetation sampling plots, and refractomers, which measure salinity.

Now in its third year, salt marsh monitoring data is used to evaluate what sites may need restoration in the future, and how well restoration efforts are working where restoration has already been done. During the first season, 50 volunteers put in over 800 hours of work, said Drociak.

"We could never do this amount and caliber of work without our volunteers and project partners," said Drociak.

The data is compiled and analyzed by NHCP staff and scientists at UNH and the Wells Natural Estuarine Research Reserve. These findings will be used as measurements to support state and regional programs that evaluate wetland restoration potential, actions, and success. State program officials also hope to compile a state of the salt marshes report, including restoration activities.

At the beginning of the season the project partners choose which sites need monitoring. Reference salt marshes, which are relatively "healthy" marshes, are also selected so that pre- and post-restoration monitoring data at other sites can be compared with them. During the 2005 season, the following salt marshes will be monitored: Awcomin Marsh in Rye (post-restoration and reference site for coastal marshes), Fairhill Marsh in Rye (post), Little River Marsh in North Hampton (pre- and post in different sections of the marsh), Pickering Brook in Greenland (post) and Vol's Island in Newmarket (reference site for Great Bay sites).

The Trouble They've Seen

Filling and dredging can change water quality and alter the proportions of fresh and salt water, leading to permanent changes in plant composition and habitat degradation.

A salt marsh is an intertidal area where fresh and salt water mix. Salt marshes are regularly flooded by tides. About 25 percent of New Hampshire's salt marshes have been lost permanently due to development.

Those not lost have been impacted by railroads, roads and development, which reduce the amount of tidal flow that reaches salt marshes. In addition, many salt marshes have been ditched, drained, or filled. Salt marsh plants, which are adapted to saltwater, need the right amount of salinity levels to grow, and fish populations need open water to survive.

Back in the 1940s it was common for salt marshes to be drained and ditched, ironically for mosquito control. Fish eat mosquito larvae, but without water, there are no fish. And without fish the mosquitoes run rampant.

Further adding to the problem, draining and ditching creates shallow depressions that fill with water; mosquitoes only need a half an inch of water to breed.

Burdick explained, "Mosquito ditches were a waste of effort and expense."

Drociak said that after efforts to restore open water habitat at Pickering Brook in Greenland, mosquito spraying is no longer necessary. For decades, this salt marsh had been sprayed during the summer.

Another threat to salt marshes is polluted stormwater runoff. Polluted stormwater flowing into salt marshes changes salt marsh habitat and contributes to the growth of invasive species, like common reed (*Phragmites australis*), which choke out natural vegetation.

About 25 percent of New Hampshire's salt marshes have been lost to development.

Giving Back

Volunteers sign up for monitoring sessions this summer.

At the end of the presentations, volunteers were asked to sign up for monitoring sessions on pre-selected dates based on the tide and partner staff availability. Some activities, like fish monitoring, are tide-dependent.

Volunteers choose the times and places according to their availability and interest. Those interested in a more independent experience can be trained to monitor salinity and groundwater. After the training, participants can go out alone within the sampling schedule dates. It typically takes between one to two hours to collect salinity samples, depending on the size of the marsh and number of sampling sites. Bird monitoring is also an independent activity, but requires some prior knowledge of salt marsh birds.

Volunteers who sign up for vegetation and fish are split into groups and accompanied by a biologist from NCHP, Ducks Unlimited, or UNH who can answer questions and provide technical assistance in the field. These sessions average four hours.

A field training session was held the evening following the classroom presentation, where participants were divided into groups and rotated among stations that were geared towards each parameter.

Among other techniques, volunteers learned to use a refratometer and how to identify common salt marsh fish, such as the stickleback, whose spiked back often causes predators to spit them out.

Before they begin work, volunteers receive fact sheets about each restored salt marsh, a volunteer handbook, and a quick reference salt marsh field guide, among other publications.

There is a strong sense of stewardship among prospective volunteers.

Volunteer marsh monitors survey vegetation last summer in New Castle.

"Great Bay is such a beautiful area. We're going to lose it if we don't start paying attention," said Melanie Wilson, presentation attendee from Kittery, Maine.

"It sounds like a great learning opportunity," said Lori Pearce, attendee from Nottingham, New Hampshire.

Lost and Found

Each season is filled with new adventures. Last year, Burdick discovered a new flowering plant species called Hibiscus. It had been previously sighted in Massachusetts, but not New Hampshire, said Burdick.

Another day, Drociak found an Adirondack chair deep in Awcomin Marsh after a storm. She hauled it out, and it now sits in her living room.

On yet another past monitoring session, a former intern got her foot stuck in the mud and could not get it out without leaving behind her boot. After several attempts to try and dig it out, it was given up for lost, and the intern had to walk through the salt marsh in one boot and one white sock.

Burdick said, "It isn't white any more!"

To become a salt marsh monitor, contact Jen Drociak at 559-0028 or jdrociak@des.state.nh.us. A classroom and field training session will be held on Saturday, June 11 from 8:30 a.m. – 1:30 p.m. at the Great Bay National Estuarine Research Reserve in Stratham.

Onsite training is also provided throughout the summer. All ages and experience levels are welcome. Student groups welcome.

For more information about salt marsh restoration visit http://www.des.state.nh.us/Coastal/Restoration.
To download the volunteer handbook and quick reference salt marsh field guide visit www.des.state.nh.us/coastal/resources and scroll down to Handbooks and Field Guides.

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Success in Sandown: Conservation Commission Circuit Riding Project

Open land helps protect water quality.

In the spring of 2004, Sandown's Conservation Commission knew that they had to do a better job getting voters to support land conservation. Voters had voted out or changed to a study all of the Commission's 23 warrant articles at the deliberative session. In a SB2-designated town like Sandown, the deliberative session decides what articles get to town meeting for vote.

When Theresa Walker, planning consultant with the Rockingham Regional Planning Commission, began work with the Commission last spring, they had two ambitious goals: convince voters to put conservation easements on town-owned land and increase the amount of money going towards the conservation fund.

With Walker's help and an intense outreach program, both goals were met.

The Sandown Conservation Commission was one of four conservation commissions in the Exeter River Watershed that received professional planning assistance through a NHCP Coastal Nonpoint Source Pollution Control Program grant given to the Rockingham Regional Planning Commission last spring. The other towns were Freemont, Kensington, and Kingston.

"This program gives conservation commissions extra hands and on the ground results," said Sally Soule, Coastal Nonpoint Source Pollution Control Program Coordinator.

"Conservation commissions have too much work to do and not enough professional resources. This is a nice way for them to know what information and resources are out there," said Walker.

The March 8, 2005 Sandown Town Meeting told a different story than the year before. Sandown voters approved five warrant articles submitted by the Conservation Commission. Three articles placed conservation easements on town-owned parcels of land. Another article added a parcel of town-owned land to town forest, which is managed by the Conservation Commission.

Voters also passed an article to allocate 100 percent of the land use change tax to a conservation fund, which can be used by the Conservation Commission to purchase open land and/or development rights. Prior to the vote, 50 percent of the tax went to the fund.

Land in the statewide current use program is taxed according to its existing state; open land is taxed less. However, a penalty is applied to land coming out of current use. In Sandown, 100 percent of this tax will now go to the conservation fund.

Walker helped the Conservation Commission choose town-owned parcels that had outstanding natural features to target for conservation easements. Parcels were chosen for their water protection properties. Some abutted the Exeter River.

"Without an easement, there is no guarantee that the town won't develop the land. We have to put a stake in the ground and say 'no,'" said Mark Traeger, Conservation Commission member.

Rockingham Planning Commission staff created GIS maps of the selected parcels showing rivers, wetlands, and topography.

Handouts of the maps were passed out at the 2005 Town Meeting. The maps were also used during Power Point presentations and appeared on local community access TV to help build awareness of their value.

The Conservation Commission also made a big effort to get people out to vote both at the deliberative session and the town meeting. They made phone calls and sent e-mails to get the word out to attend the meetings, said Traeger.

Traeger also said that new construction alerted people to the loss of their open space.

Walker describes the eight member Sandown Conservation Commission as active and interested.

Another outgrowth of the NHCP Coastal Nonpoint Source Pollution Control Program grant is the Conservation Commission Roundtable, a forum for conservation commissions to "gripe and brag about what they do," said Walker. It is open to all conservation commissions in the 27 towns in the Rockingham Planning Commission region. The Roundtable began last year and meets quarterly.

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Surfing in New Hampshire Not for the Faint of Heart

Dave Cropper, Owner of Cinnamon Rainbows

Surfers face cold water temperatures here in the Granite State. There are waves year round, and often the best ones are in the winter and spring, but it is not for the faint of heart. Water temperatures drop to the 30s during the winter months. And that is not counting frigid air temperatures and blustery winds.

There is a sense of camaraderie among surfers here.

"If you're out there in the freezing cold of winter, you belong," said Derek Durbin, area surfer.

Dave Cropper, owner of Cinnamon Rainbows Surf Shop in Hampton, describes New Hampshire as "surfer friendly." He said that surfers are respected here. In Hampton there is a tight surfing community of hardy individuals who surf and reside year round.

What about the quality of surf?

Waves, or swells, can be good here, but are not as consistent as in other places, said Cropper. Durbin said waves average four to six feet in the winter and spring months. Summer in New Hampshire is the flat season and a good opportunity for beginners to hit the waves.

New Hampshire boasts many rocky points, called jetties, which are known for having bigger waves than those breaking on the beach. Jetties are a New Hampshire surfer's delight.

The cold water and the unpredictability of the waves in New Hampshire make it a hit or miss.

According to Durbin, "Surfing in New Hampshire is like the quote from the movie Forrest Gump: 'you never know what you're gonna get.'"

Cropper's favorite time of year to surf in New Hampshire is August and September, when the water has warmed up to the low 70s. He describes the ideal conditions as a sunny, warm day when hurricane swells are coming from far out to sea.

"The planets have to align for that to happen," Cropper said.

He also said that it is a misconception that surfing is all about riding on waves. Much of the challenge is paddling out on your stomach to get past the breaking waves.

Durbin said that he needs to get out two to three times a week to maintain surfing shape.

"Otherwise you get worked," he said.

Another misconception is that surfers go around saying thing like "'Gnarly dude, totally tubular,'"said Cropper.

"Real surfers don't talk like that," said Cropper.

Cropper has traveled the world, including Hawaii, Fuji, New Zealand, Central America, and the Caribbean, but said that his favorite times are surfing in his own backyard.

Cropper said that the perception of New Hampshire surfing in his travels is bleak.

"People aren't sure that there's waves, and they think it's too cold," said Cropper.

When Durbin visited Santa Cruz, Calif. to surf the Pacific, he met some fellow surfers who thought New Hampshire was somewhere by Michigan.

Cropper said surfing in New Hampshire is growing in popularity as wet suit technology improves and prices for them go down.

Swells average four to six feet in New Hampshire

On a good day, there will be a few hundred people in the water at Hampton Beach, according to Cropper.

Modern fiberglass boards are a lot lighter than their wooden 40 to 60 pound predecessors. New boards are also designed using mathematical principles that help them catch waves even better, said Peter Slovinsky. Slovinsky is an area surfer and co-chair of the Northern New England Chapter of Surfrider Foundation, a national nonprofit working to protect oceans, waves and beaches. The safety leash, which keeps the surfer and board connected at all times, is another advancement in surfing technology, he said.

Durbin describes surfing as an adrenaline rush. "It's a new adventure every time you are out there." Sometimes he thinks, "What's under me? What happens if a big swell comes?"

"Out on the water you see things from a different perspective. I feel like I'm more in touch with what's going on," said Durbin.

Surfing Activism in Northern New England

The two biggest issues facing New England surfers are water quality and access, said Peter Slovinsky, area surfer and co-chair of the Northern New England Chapter of Surfrider Foundation, a national nonprofit working to protect oceans, waves and beaches.

Surfrider Foundation has over 60 chapters and over 40,000 members located along the East, West, Gulf, Puerto Rican, and Hawaiian coasts.

Slovinsky started the Northern New England Chapter in 2001 with a York, Maine resident who was also interested in starting up a local chapter. After moving to Maine from South Carolina, where Slovinsky had been involved with the Charlestown Chapter, he was looking to get involved again.

The Northern New England Chapter focuses most of its activities in Maine, but would like to further expand into New Hampshire. The chapter meets once a month, alternating between Portland and York. There are five officers and about 130 active members, some New Hampshire residents.

The Northern New England Chapter is working with the Maine Coastal Program on water quality sampling.

Surfers go out whenever there are good waves, including during rainstorms when polluted runoff is highest.

"If it's rained five inches and it coincides with good waves, we're going to be out there. Surfers are an indicator species. If there's water quality problems, we're the first ones to get sick," Slovinsky said.

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ANNOUNCEMENTS

NHCP Welcomes Ducks Unlimited Summer Field Technician Brandi Bornt

Brandi Bornt, Ducks Unlimited Coastal Restoration Field Technician, will be working with the New Hampshire Marsh Monitors Volunteer Salt Marsh Monitoring Program this summer. The marsh monitors is a program administered by NHCP, Ducks Unlimited, and the University of New Hampshire Jackson Estuarine Laboratory. Throughout the summer, trained volunteers assess salt marsh health by monitoring and sampling salinity and groundwater levels, vegetation, and fish and bird populations. Brandi will coordinate volunteers, set up fieldwork and provide assistance to volunteers in the field.

Brandi completes her M.S. in Conservation Biology from Antioch College in Keene this year. The field technician position fulfills part of her practicum requirement for that degree. Past volunteer coordination includes working with a high school biology class doing fieldwork on vernal pools in Pisgah State Park. Brandi has also worked with volunteers assessing water quality of the Ashuelot River by looking at macroinvertebrate indicators.

Before going to graduate school, Brandi taught high school biology and physics in Rhode Island and Massachusetts.

Contact Brandi at brandi_bornt@antiochne.edu

Grant Funding Available to Coastal Communities

DES has released a Request for Proposals (RFP) for coastal municipalities to eliminate illicit storm sewer discharges, create municipal storm sewer maps and conduct illicit discharge detection surveys in coastal communities. The RFP is on-line at http://www.des.state.nh.us/WMB/Was/request_for_proposals.htm or

can be obtained by contacting Jeff Marcoux at (603) 271-8862 or by email at jmarcoux@des.state.nh.us.

Proposals are due by Friday, June 17, 2005. A total of $60,000 in matching funds is available for projects, (pending N.H. Governor and Executive Council approval).

This funding comes from the New Hampshire Estuaries Project (NHEP) and helps communities address several water quality action items identified in the NHEP's Management Plan for the coastal watershed. DES is working with the NHEP to improve shellfish resources and to reduce recreational health risks in the Seacoast region. Previous grant project summaries can be found under the Water Quality section at http://www.nh.gov/nhep/publications/publications-by-category.htm#Water%2.

Project development assistance or questions about the grant should be directed to Jeff Marcoux at (603) 271-8862 or by email at jmarcoux@des.state.nh.us.

April 2005 Yankee Magazine Lists Great Bay as one of the Most Beautiful Places in New England

Great Bay is one of six outdoor spots featured as the most beautiful places in New England in the April 2005 edition of *Yankee* Magazine. Great Bay is noted for its sunsets, kayaking, and bird habitat. Some of the other natural beauties listed were the coast of Maine and Crane Beach (Ipswich, Mass.).

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NEW PUBLICATIONS & PLANNING TOOLS

Dynamic Atlas of the Gulf of Maine

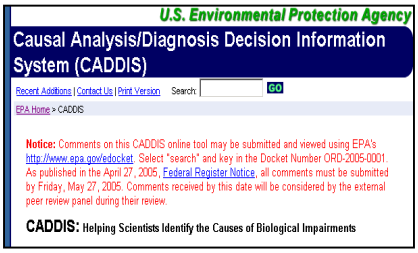
What is the long-term trend in Atlantic cod abundance in the Gulf of Maine?

To answer this and other Gulf of Maine data questions visit http://gmbis.iris.usm.maine.edu, the website of the Dynamic Atlas of the Gulf of Maine. The website is a product of the Gulf of Maine Biogeographic Information System. Users can explore, download and map biological and biogeographical data from multiple sources.

This first version primarily offers datasets from the National Marine Fisheries Service and the Canadian Department of Fisheries and Oceans, plus additional features to help visualize the data in meaningful ways. In the coming months, the website will include more datasets, enhanced mapping capabilities, improved search features, and educational tools for students and teachers.

The Dynamic Atlas of the Gulf of Maine and the Gulf of Maine Biogeographic Information System are part of the Gulf of Maine Area Program of the Census of Marine Life.

CADDIS Watershed Planning Tool



The Casual Analysis/Diagnosis Decision Information System (CADDIS) is a new tool for watershed planning released by the U.S. Environmental Protection Agency. The tool includes a step-by-step guide to help watershed planners and implementers link biological impairment to sources of impairment.

Visit http://www.epa.gov/caddis for more information.

CZ-Mail, Massachusetts Office of Coastal Zone Management E-newsletter

CZ-Mail is the monthly e-mail newsletter from the Massachusetts Office of Coastal Zone Management (CZM). This update provides information on major CZM initiatives, available tools and publications, upcoming workshops and events, grants, contracting opportunities, job openings, coastal legislation, and other news of interest to people working on coastal issues. More information about CZM's programs, publications, and other coastal topics can be found online at http://www.mass.gov/czm/. If you would like to add your name to the mailing list, please e-mail your request to czm@state.ma.us.

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CALENDAR OF EVENTS

Exeter River Alewife Festival

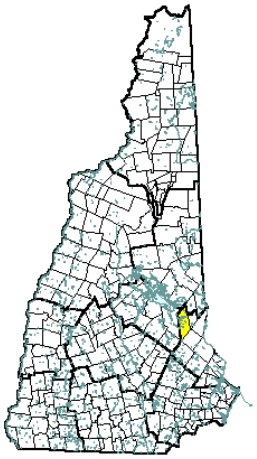
Date: Saturday, June 4, 2005; Rain Date: Sunday, June 5
Time: 10 a.m.- 2 p.m.
Location: Swasey Parkway, Exeter, N.H.
Sponsored By: Exeter River Local Advisory Committee

See migrating Alewives and other fish. Meet representatives from local and regional environmental and community organizations. Learn about the river's role in area history. Enjoy exhibits by local artists and boatbuilders. Join in kids activities and a canoe and kayak race. Enjoy hot and cold food and live music.

Supporters of this event include NHCP and the New Hampshire Estuaries Project.

For a complete list of supporters and a schedule of events, contact (603)-778-0885 or http://www.exeterriver.org/events.html.

Dealing With Growth in Wakefield Presentation



Date: Tuesday, June 8, 2005

Time: 7:00 – 9:00 p.m.

Location: Wakefield Town Hall/Opera House, Wakefield, N.H.

Sponsored By: Natural Resources Outreach Coalition (NROC) and the town of Wakefield

The UNH cooperative extension and Strafford Regional Planning Commission will give a Power Point presentation on issues and concerns surrounding growth in Wakefield. All are welcome to attend. Contact Amanda Stone at NROC for more information at (603) 364-5324 or amanda.stone@unh.edu.

New Hampshire Marsh Monitors Volunteer Salt Marsh Monitoring Program Training

Date: Saturday, June 11, 2005

Time: 8:30 a.m. – 1:30 p.m.

Location: Great Bay National Estuarine Research Reserve, Stratham, N.H.
Sponsored By: NHCP, Ducks Unlimited & UNH Jackson Estuarine Laboratory

This training session provides instruction on how to evaluate the health of salt marshes for people interested in becoming volunteers with the Salt Marsh Monitoring Program. Throughout the summer, trained volunteers monitor and sample salinity and groundwater levels, vegetation, and fish and bird populations. The data is used by resource managers to make decisions about restoration.

For more information and directions go to http://www.des.state.nh.us/Coastal/pdf/NH_Volunteer_Saltmarsh_Monitoring_Flyer_2005.pdf.

Contact Jen Drociak to RSVP at (603) 559-0028 or jdrociak@des.state.nh.us.

Identifying the Conservation Values of Land

Date: Friday, June 17, 2005

Time: 1:00 p.m. – 4:00 p.m.

Location: Rosenfield-Mallette Conservation Easement, Deerfield, N.H.

Sponsored By: UNH Cooperative Extension, the Center for Land Conservation Assistance, The Nature Conservancy, Rockingham Land Trust and Rockingham County Conservation District.

This workshop is part of the Friday Afternoon Conservation Workshop Series and will involve an exploration for features of conservation importance. Learn how to recognize important wildlife habitat features and signs as well as rare and common plants and landscape features and other conservation values.

Call Sharon Hughes, UNH Cooperative Extension, at (603) 862-1029, or e-mail at Sharon.Hughes@unh.edu to register for this workshop or a complete listing of series events.

Reading the Forested Landscape

Date: Friday, July 15, 2005

Time: 1:00 p.m. – 4:00 p.m.

Location: College Woods, University of New Hampshire, Durham, N.H.

Sponsored By: UNH Cooperative Extension, the Center for Land Conservation Assistance, The Nature Conservancy, Rockingham Land Trust and Rockingham County Conservation District.

This workshop is part of the Friday Afternoon Conservation Workshop Series. Learn about how both natural history and human influences shape forests. See examples of agricultural, forest management and natural disturbances, such as beaver and hurricanes.

Call Sharon Hughes, UNH Cooperative Extension, at (603) 862-1029, or e-mail at Sharon.Hughes@unh.edu to register for this workshop or a complete listing of series events.

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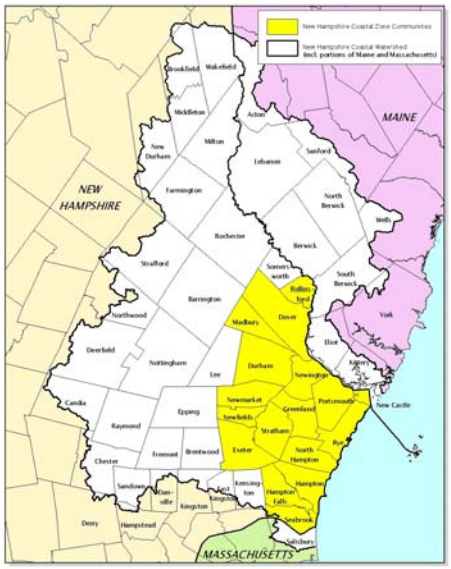
About this e-newsletter

The Rip Tide is NHCP's bi-monthly e-newsletter. Articles are written by Catherine Coletti.

All subscribers (e-mail addresses) on this list are kept confidential and are not shared by NHCP.

Contact Catherine Coletti at 559-0024 with questions or comments.



About NHCP

NHCP's mission is to "balance the preservation of natural resources of the coast with social and economic needs of this and succeeding generations."

NHCP gained federal approval in 1982 under the provisions of the Coastal Zone Management Act, initially for the areas in proximity to the Atlantic shore and the lower Piscataqua River. In 1988, the Program added areas bordering the Great Bay and tidal rivers, but only up to the statutory (RSA 482-A) limits for tidal flow. In 2004, the landward boundary was again expanded to encompass the total area of the 17 tidal municipalities.

The map depicts New Hampshire's Coastal Watershed area. The 42 communities that make up the watershed are linked by waterways back to the 17 tidal coastal communities and ultimately to the Gulf of Maine.

DES administers NHCP. NHCP is networked with other state agencies, which help enforce the program's 16 coastal policies and conduct reviews of projects in the New Hampshire coastal zone.